

**2014 IE REPORT TRANSMITTAL FORM**

Name of person submitting information:

Dr. Debra B. Jackson

The information included in the attached reports is current and correct to the best of my knowledge.

Title:

Vice Provost and Assistant to the President

Institution:

Clemson University

Phone:

864.656.4592

Fax:

864.656.6839

Email:

dbj@clermson.edu

**Institutional web address of  
Mission Statement:**

<http://www.clemson.edu/president/vision.html>

**Date approved by Board of Trustees or Area Commission:**

Clemson University Board of Trustees  
January 26, 2001.

**Date approved by Commission on Higher Education:**

2001

**Institutional web address of  
Summary Report:**

<http://www.clemson.edu/administration/index.html>

**Institutional web address of Title II Report:  
(Four-year institutions only)**

<http://www.clemson.edu/hehd/departments/education/about/titleII.html>

Check list of IE Reports due **August 1, 2014**

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Professional Examinations Table

**Date Submitted:**

August 1, 2014

**CLEMSON UNIVERSITY**

**SUMMARY REPORT  
ON  
INSTITUTIONAL EFFECTIVENESS**

**SUBMITTED TO  
THE SOUTH CAROLINA COMMISSION ON HIGHER EDUCATION**

**AUGUST 2014**

INSTITUTION:

**Clemson University – 2014 Annual IE Report**

*Results of Professional Examinations*

**APPLICABLE TO ALL SECTORS – REPORTED FOR APRIL 1, 2013- MARCH 31, 2014**

According to Section 59-101-350, the Commission is responsible for collecting “student scores on professional examinations with detailed information on state and national means, passing scores, and pass rates, as available, and with information on such scores over time, and the number of students taking each exam” from four- and two-year institutions to be included in the annual report to the General Assembly. The Commission on Higher Education also uses this information as the primary source with which to fulfill requirements in Section 59-103-30 for performance funding to collect information on Instructional Quality and Graduates’ Achievements by looking at the scores of graduates on post-undergraduate professional, graduate, or employment-related examinations and certification tests.

Past committee work and the development of performance funding have defined the collection of this information to include only first-time test takers (except the teacher education exams at four-year institutions, which include all test takers) for those students who completed an examination during the period of **April 1, 2013 through March 31, 2014**. The following tables display the exams that each sector has reported in the past. Please use this list as a guide for the exams you report this year on the table provided. **Please be aware that your institution may have students taking certification exams that have not been reported on in the past.** This would be the case if students were just beginning to complete a new program. In such cases, please report the scores and indicate that the exam is new to the table. New exams will not be used for Performance funding reporting.

***THE COMMISSION WILL REQUEST NATIONAL AND STATE PASS RATES AND ANY ADDITIONAL INFORMATION FOR THESE EXAMINATIONS, AS IT IS AVAILABLE, FROM NATIONAL AND STATE AGENCIES TO BE USED IN THE REPORT TO THE GENERAL ASSEMBLY. THESE NATIONAL AND STATE AGENCIES CAN BE FOUND IN “A CLOSER LOOK.”***

## **Construction Science and Management: Constructor Certification Level 1**

Clemson University's Bachelor of Science in construction science and management was established in 1962 and is accredited by the American Council for Construction Education. Below are the pass rates for the American Institute of Constructors Constructor Certification Level I examination for the past five years:

### **Certification of Construction Science Graduates**

<b>Year</b>	<b>Pass Rate</b>
2005	58%
2006	60%
2007	75%
2008	80%
2009	77%
2010	65%
2011	79%
2012	82%
2013	69%

As the table demonstrates, after making a significant and steady improvement over the previous four years, the pass rate began to fall in 2009. In 2010 the pass rate dropped to 65% (the national average is 63%). Due to the substantial change in pass rates over the past several years, the faculty met to determine the cause and attempt to rectify the problem. The faculty found that one of the reasons for the decline in pass rates was that the students were not receiving instruction in one of the key areas assessed by the exam until after they took the exam. Steps are currently in progress to rectify this problem.

### **Nursing: NCLEX Examination**

Clemson University School of Nursing NCLEX pass rate for 2013 is 90.10%. We are continuing with a number of strategies that have led to increased success over the past six years. Faculty members continue to carefully review the curriculum to identify and eliminate any areas of omission or excessive redundancy and to coordinate content among courses in each semester to facilitate student application and long-term learning in preparation for professional nursing practice. The Kaplan comprehensive testing program has been well received. This program includes specialty testing in each clinical area. Students are expected to pass the test at or above the national average before moving to the next semester. Alternate exams are available and the program offers a wide variety of online remediation for each specialty area. The identification and elimination of learning gaps in each area strengthens preparation as nursing professionals as well. These exams give the students additional practice on a nationally normed exam with the NCLEX format and additional resources if they need additional review in a particular content area. Before including this testing plan, many of our honors students were paying out of pocket for the live review following the completion of the program. Now all students attend this strategies focused testing review between final exams and graduation. The high stakes nature of the exam that is now required for employment justifies the additional

testing and preparation. The NCLEX test gives the successful tester increasingly difficult questions. The number of items on the exam ranges from 75-250. Students compete among themselves for the smallest number of questions for a successful outcome. We continue to have a large number of students who report taking only the minimum 75 questions. The Clemson University undergraduate nursing program maintains close to a 100 percent job placement rate within 3 months of graduation.

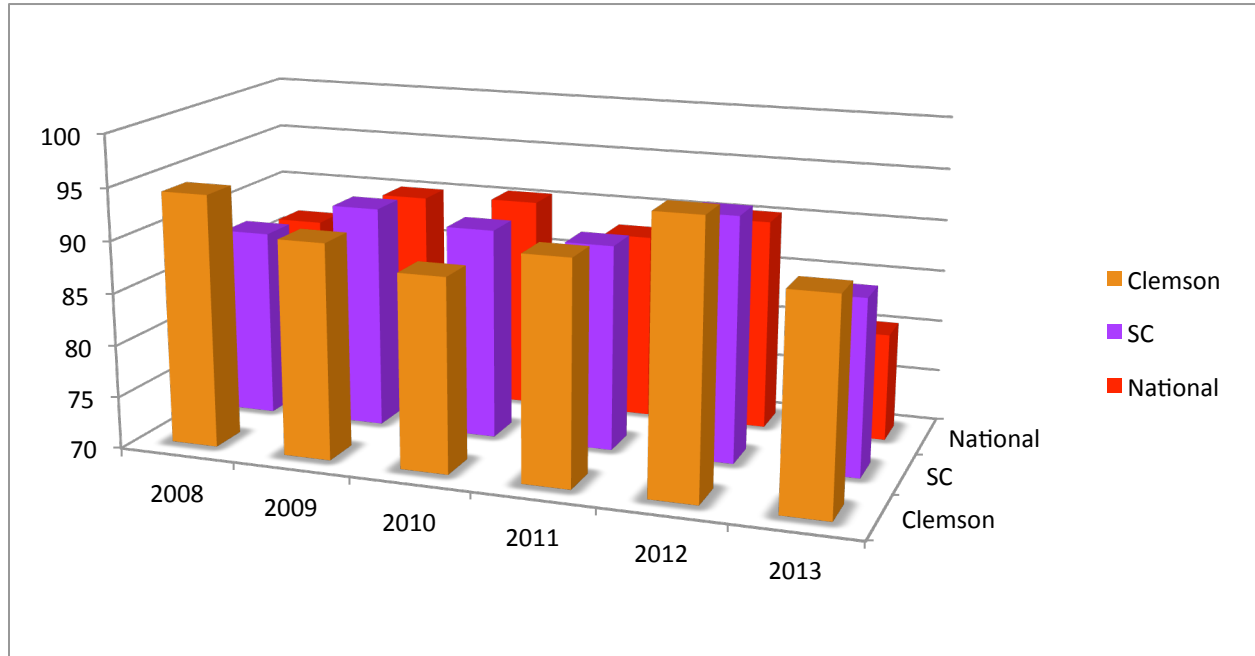
### National Council Licensure Exam (NCLEX) 2008-2013

Name of Exam	Year	# of 1 <sup>st</sup> Time Examinees	# of 1 <sup>st</sup> Time Examinees who Passed	% 1 <sup>st</sup> Time Examinees Passing
National Council Licensure Exam (NCLEX) - Registered Nurse (BS)				
Clemson University	2008	104	94	90.38%
South Carolina NCLEX Pass Rate	2008	1911	1669	87.34%
National NCLEX Pass Rate	2008	129114	111979	86.73%
Clemson University	2009	103	98	95.15%
South Carolina NCLEX Pass Rate	2009	2158	1907	88.37
National NCLEX Pass Rate	2009	134728	119131	88.42
Clemson University	2010	107	96	89.72
South Carolina NCLEX Pass Rate	2010	2197	1967	89.53
National NCLEX Pass Rate	2010	140883	123158	87.42
Clemson University	2011	114	104	91.23
South Carolina NCLEX Pass Rate	2011	2215	1986	89.66
National NCLEX Pass Rate	2011	144565	127074	87.90
Clemson University	2012	97	93	95.88
South Carolina NCLEX Pass Rate	2012	2,337	2,182	93.37
National NCLEX Pass Rate	2012	150,251	135,743	90.34
Clemson University	2013	101	91	90.10
South Carolina NCLEX Pass Rate*	2013	2297	1995	86.85
National NCLEX Pass Rate*	2013	155,095	128,792	80.34

\*Source: South Carolina Board of Nursing:

<http://www.llr.state.sc.us/POL/Nursing/pdf/NursingPrograms/NCLEX%20for%20RN%20bsn%20LLR%20BON%20web%20page%202011.pdf>

## Clemson, South Carolina, and National NCLEX Pass Rates



### **Accounting: CPA Examination**

Since 1989 the School of Accountancy and Legal Studies has held AACSB Accounting Accreditation for its undergraduate and graduate programs. AACSB International is the premier accrediting agency for management education and the only grantor of accounting accreditation.

South Carolina requires at least 1 year of accounting experience under the direct supervision and review of a CPA or Public Accountant who is licensed to practice in some state or territory of the United States, or the District of Columbia to sit for the CPA Examination and be licensed to practice. The faculty at Clemson believes the best preparation to sit for the CPA Examination is to wait until a master of accountancy degree program is completed. Clemson has a coordinated undergraduate/graduate program that will meet the 150-hour requirement to be licensed as a CPA. This program of study provides excellent preparation for the CPA Examination, as well as, a career in accounting. The Master of Professional Accountancy (MPAcc) program added to the undergraduate program exceeds the 150-hour requirement for licensure and allows the student to specialize in either assurance and management services or taxation.

**School of Education: PRAXIS Examinations**

State licensure is required for initial level teacher preparation program candidates to be practicing teachers in SC. Candidates must pass the PRAXIS I before being admitted to professional level (junior-senior year) of our programs or may exempt PRAXIS I with state standard acceptable level of ACT or SAT scores. Then candidates must take and pass PRAXIS II Principles of Learning and Teaching (PLT) and subject area test(s) for the degree and content area for state licensure. Clemson University’s [Eugene T. Moore School of Education](#) submits Title II Reports that generate official PRAXIS II licensure test pass rates annually. The 2012-13 Title II report was complete in April 2014. Clemson presents this official report below on 2012-13 program completers rather than providing a best estimate on the current year since official Title II report is not released for 2013-14 year’s candidates.

Educational leadership, school counseling and literacy education advanced level programs require passes for PRAXIS II subject area tests for certification and practice as school counselors, school leaders, and literacy specialists. Pass rates for all three are 100% for 2012-13. These tests are not included in the table below.

**PRAXIS II Examination Pass Rates: Initial Teacher Licensure Programs  
Program Completers 2012-13<sup>1</sup>**

<b>Name of Exam</b>	<b>Date(s) Administered</b>	<b># of Examinees</b>	<b># of Examinees who Passed</b>	<b>% Examinees Passing</b>
<b><i>PRAXIS SERIES II: PRINCIPLES OF LEARNING &amp; TEACHING (EARLY CHILDHOOD)</i></b>	Computer based monthly / paper bi-monthly	<b>29</b>	<b>29</b>	<b>100%</b>
<b><i>PRAXIS SERIES II: PRINCIPLES OF LEARNING &amp; TEACHING (K-6)</i></b>	Computer based monthly / paper bi-monthly	<b>93</b>	<b>93</b>	<b>100%</b>
<b><i>PRAXIS SERIES II: PRINCIPLES OF LEARNING &amp; TEACHING (5-9)</i></b>	Computer based monthly / paper bi-monthly	<b>37</b>	<b>37</b>	<b>100%</b>
<b><i>PRAXIS SERIES II: PRINCIPLES OF LEARNING &amp; TEACHING (7-12)</i></b>	Computer based monthly / paper bi-monthly	<b>71</b>	<b>71</b>	<b>100%</b>
<b><i>PRAXIS SERIES II: SPECIALTY AREA TESTS</i></b>	Computer based monthly / paper bi-monthly	<b>252</b>	<b>246</b>	<b>97.6%</b>

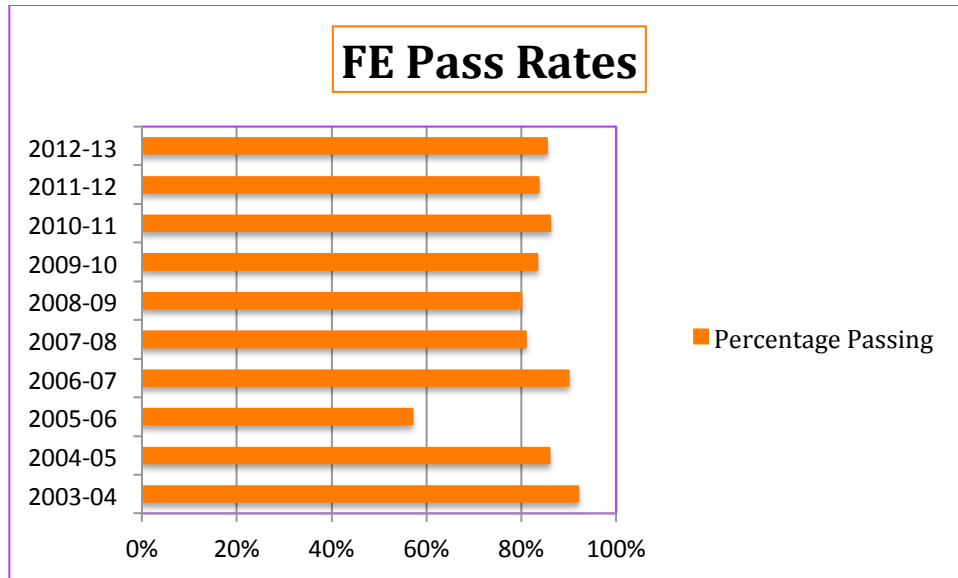
<sup>1</sup> from TITLE II Report, April 2014.

## **Engineering: Fundamentals of Engineering Examination**

All seniors in the engineering programs at Clemson University are encouraged to take the Fundamentals of Engineering (FE) examination. The programs involved are: Bioengineering, Biosystems Engineering, Chemical and Biomolecular Engineering, Civil Engineering, Electrical and Computer Engineering, General Engineering, Industrial Engineering, Materials Science and Engineering, and Mechanical Engineering. The FE pass rates for all engineering programs for 2003-2013 are given below:

Academic Year	Percentage Passing
03-04	92%
04-05	86%
05-06	57%
06-07	90%
07-08	81%
08-09	80%
09-10	83.4%
10-11	86.1%
11-12	83.7%
12-13	85.45%
13-14	Not yet available





### **Health Science, Health Promotion and Education: CHES Examination**

The Health Promotion and Education Concentration within the Department of Public Health Sciences (DPHS) program was designed to provide students with the competencies of the Certified Health Education Specialist (CHES). Participation in the national CHES exam is optional. The National Commission for Health Education Credentialing recently announced that Clemson University was among the top 10 schools with the most students taking the CHES exam in 2007. For the past 11 years, Clemson University DPHS students have scored above the national average. The table below gives the most recent CHES Examination results.

<b>Clemson University: April 2013-October 2013</b>									
	Assess Needs	Plan Programs	Implement Programs	Evaluate Programs	Administer Programs	Act as a Resource	Communicate /Advocate	Total Score	Percent Passed
Cohort National Average Scores	12.88	15.20	25.64	13.97	12.14	16.79	7.31	103.93	71.56%
Clemson Average Scores	14.20	17.60	29.40	18.00	12.20	18.20	9.20	118.80	100%

### **Nutrition and Dietetics Concentration Report**

To become a Registered Dietitian, students must complete an accredited dietetics undergraduate program and then secure an accredited dietetic internship. Applying and securing a dietetic internship is competitive and the process is completed through computerized matching. For the 2013-2014 academic year, Clemson had 36 graduates apply for a dietetic internship and 18 were accepted resulting in a 51% computer-matching rate. The national computer-matching rate for dietetic internship applicants for 2013-2014 academic year was ~50%. Clemson's 5-year match rate (Fall 2009 to spring 2014) was 50% and the national computer-matching rate from that time period was ~50%.

The Commission on Dietetic Registration tracks the percentage of Clemson graduates who pass the national registration examination for dietitians. In the 2013 calendar year, Clemson had 15 students take the exam for the first time and 14 passed resulting in a 93% pass rate. Over a 5-year period (2009-2013) 91% of the graduates who took the Registration Examination for Dietitians passed on the first attempt. Mean scaled scores for Clemson graduates during that time period were higher than the national mean scaled scores for the total score, and for both the scaled sub-scores for Food/Nutrition and Foodservice Systems/Management.

**Architecture: Architect Registration Examination (ARE)**

The Architect Registration Examination (ARE) administered by the National Council of Architecture Accrediting Boards (NCARB) tests candidates on their knowledge, skills, and abilities in various aspects of the practice of architecture. The content of the ARE examination relates to actual situations that an architect will encounter in practice. The ARE treats the practice of architecture as an integrated whole measuring not just knowledge areas but also critical thinking and judgment. The most recent results available, for the 2012 administration, are in the table below.

	Programming, Planning & Practice	Site Planning & Design	Building Design and Construction Systems	Schematic Design	Structural Systems	Building Systems	Construction Documents and Services
Clemson	44%	78%	65%	72%	75%	67%	76%
U.S.	61%	67%	65%	76%	71%	67%	62%

**ETS Proficiency Profile**

The ETS Proficiency Profile is a nationally-normed, standardized test that measures skills in critical thinking, reading, writing, mathematics, humanities, social sciences, and natural sciences. Since Fall 2011 all incoming freshmen have been required to take the test. In Spring 2015 all seniors will be required to take the test. In this way we can do a longitudinal tracking on individual students to measure the “value-added” component of a Clemson education. Clemson University will be the first institution to use the Proficiency Profile in this way. The skill areas are scored from 100-130. The Overall Score is on a scale of 400-500. As may be seen from the following chart, Clemson students score significantly higher in each skill and in overall score than the national average.

**ETS Proficiency Profile: Summary of Scaled Scores 2008-2014**

Academic Year	Class	Overall Score	Critical Thinking	Reading	Writing	Mathematics	Humanities	Social Sciences	Natural Sciences
2013-14	Freshmen	461.86	115.38	122.17	117.78	118.48	118.11	116.14	118.53
	Seniors	454.72	114.06	119.95	116.24	116.60	116.37	115.07	117.01
2012-13	Freshmen	458.53	115.16	121.35	116.70	117.85	117.46	116.40	118.36
	Seniors	460.11	115.11	121.28	117.17	118.37	117.57	116.03	117.85
2011-12	Freshmen	457.29	114.95	121.17	116.45	117.5	117.27	116.29	118.14
	Seniors	457.53	115.03	120.85	116.18	118.11	117.42	116.31	117.77
2010-11	Freshmen	451.51	113.12	119.88	116.13	115.55	116.31	114.79	116.83
	Seniors	457.78	115.3	121.05	116.31	117.58	119.96	116.21	117.99
2009-10	Freshmen	449.07	112.65	119.36	115.37	114.95	115.93	114.28	116.47
	Seniors	457.26	114.75	120.96	116.26	117.81	117.29	116.36	117.74
2008-09	Freshmen	450.36	113.03	119.61	115.77	115.30	116.11	114.68	116.66
	Seniors	459.22	115.42	121.52	116.36	118.35	118.01	116.84	118.07
National Averages Four-Year Colleges and Universities	Freshmen	437.00	109.70	115.5	112.9	111.8	112.9	111.5	113.3
	Seniors	447.80	112.80	119.00	114.90	114.20	115.70	114.40	116.10

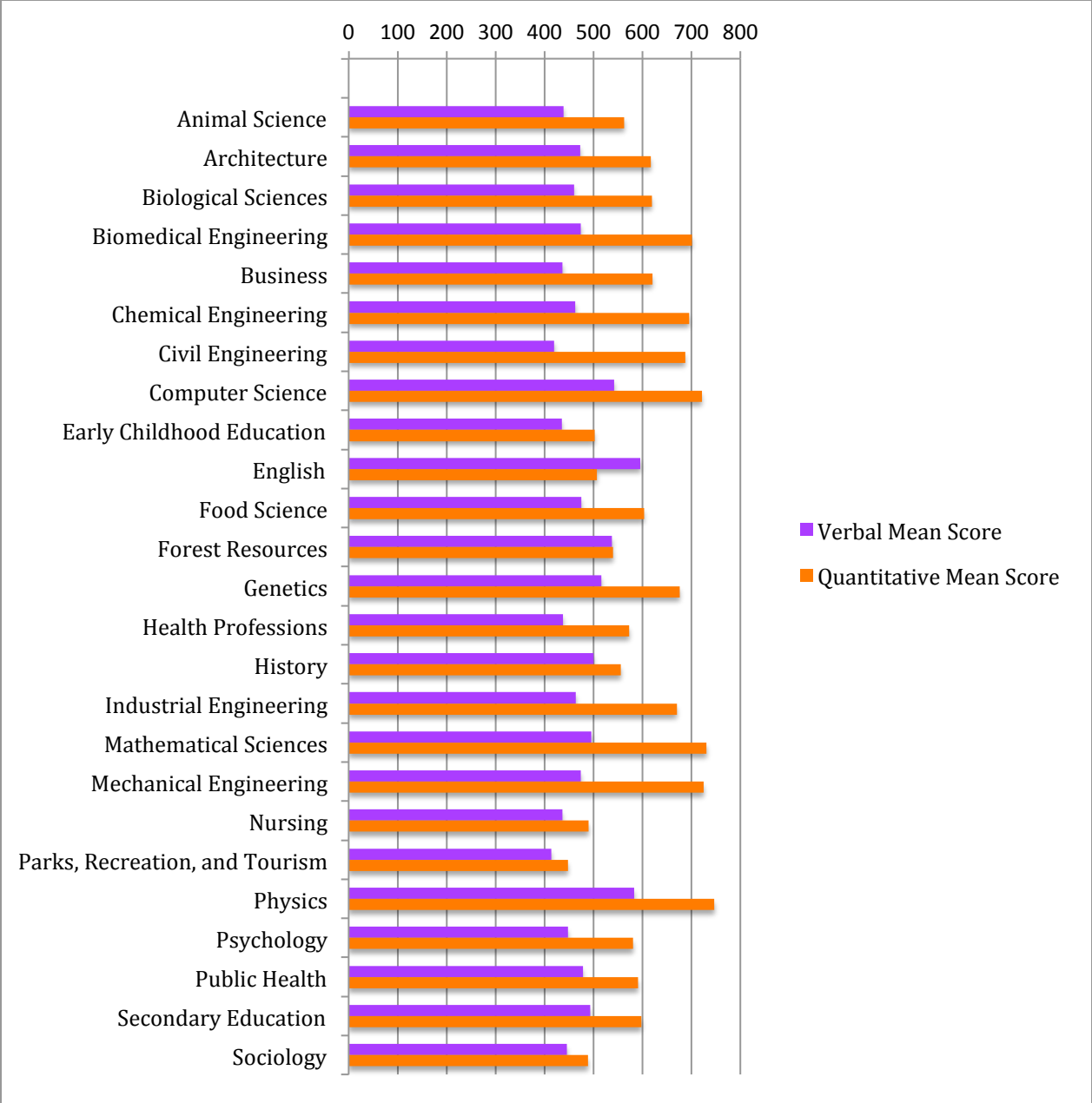
## **Graduate Record Examination (GRE)**

The Graduate Record Examination is not a professional licensure examination but it provides insight into the general performance of students who select to take the examination and that they are graduates of Clemson University. Undergraduate or graduate students may take the examination and it may be taken multiple times. This measure of student development cannot be considered either graduate or undergraduate but provides a comparison of scores among the disciplines.

### **Clemson Graduates Graduate Record Examination Results**

<b>Discipline</b>	<b>Sample Size</b>	<b>Verbal Mean Score (range)</b>	<b>Quantitative Mean Score (range)</b>	<b>Writing Mean Score (range)</b>
Animal Science	84	439 (300-640)	563 (420-770)	4.93 (2.5-5.4)
Architecture	61	473 (320-740)	617 (440-800)	3.8 (2.5-4.5)
Biological Sciences	72	460 (320-590)	619 (440-750)	3.9 (3.0-4.5)
Biomedical Engineering	67	474 (310-660)	701 (540-800)	3.85 (2.5-5.0)
Business	16	437 (280-630)	620 (570-700)	3.92 (2.5-4.5)
Chemical Engineering	17	463 (280-700)	695 (590-800)	3.65 (2.5-4.5)
Civil Engineering	35	420 (260-700)	687 (490-800)	3.45 (2.5-4.5)
Computer Science	17	542 (310-770)	721 (520-800)	4.1 (2.5-4.5)
Early Childhood Education	20	435 (310-600)	502 (320-660)	3.9 (2.5-4.5)
English	10	596 (490-730)	507 (320-780)	4.10 (2.5-5.0)
Food Science	25	475 (320-650)	603 (280-740)	3.74 (2.5-5.0)
Forest Resources	9	538 (430-610)	540 (400-700)	3.78 (2.5-5.0)
Genetics	18	516 (410-690)	676 (510-800)	4.31 (2.5-6.0)
Health Professions	17	438 (310-550)	573 (520-750)	4.23 (2.5-5.0)
History	19	500 (400-710)	556 (420-750)	3.97 (2.5-6.0)
Industrial Engineering	17	464 (360-590)	670 (440-770)	4.00 (2.5-6.0)
Mathematical Sciences	18	496 (380-730)	731 (630-800)	3.85 (2.5-5.0)

				5.0)
Mechanical Engineering	44	474 (310-680)	725 (630-800)	3.61 (2.0-5.0)
Nursing	49	436 (270-630)	490 (260-760)	3.77 (2.5-4.0)
Parks, Recreation, and Tourism Management	15	414 (270-650)	448 (310-740)	3.86 (3.0-4.0)
Physics	14	583 (500-670)	747 (640-800)	4.23 (4.0-5.0)
Psychology	80	448 (320-630)	581 (350-740)	4.03 (3.0-5.5)
Public Health	45	478 (330-680)	591 (430-740)	3.95 (3.0-5.5)
Secondary Education	20	493 (360-620)	598 (370-800)	4.0 (3.0-4.5)
Sociology	16	446 (310-570)	489 (340-650)	3.75 (2.0-5.0)



## Program-Specific Accreditation

Program-specific accreditations are a reliable indicator of the quality of particular academic programs. In addition to institutional accreditation through SACS/COC, academic programs may be accredited through program-specific accrediting bodies. The following table lists accredited programs at Clemson University in academic year 2013-2014.

Accrediting Body and Degree Program	Accreditable Program	Fully-Accredited Program	Last Accreditation	Next Accreditation
<b>American Assembly of Collegiate Schools of Business - International Association for Management Education</b>				
Baccalaureate, Master's and Doctoral degree programs in business administration and management	X	X	2010	2015
Baccalaureate, Master's and Doctoral degree programs in accounting	X	X	2010	2015
<b>Accrediting Board for Engineering and Technology, Inc.</b>				
Engineering (ENG) - Baccalaureate programs in engineering	X	X	2012	2018
Master's programs in engineering				
Computer Science (COMP)- Baccalaureate programs in computer science	X	X	2012	2014
<b>American Council for Construction Education</b>				
Construction Education (CONST) - Baccalaureate degree programs	X	X	2013	2019

Construction Education (CONST) – Master’s degree programs	X	X	2012	2017
<b>American Society of Landscape Architects</b>				
Landscape Architecture (LSAR)- Baccalaureate and master's programs leading to the first professional degree	X	X	2009	2015
<b>Accreditation Council for Education in Nutrition and Dietetics (ACEND)</b>				
Nutrition and Dietetics – Baccalaureate program	X	X	2007	2017
<b>Commission on Collegiate Nursing Education (CCNE)</b>				
Baccalaureate degree in nursing education programs	X	X	2010	2020
Graduate degree nursing education programs	X	X	2010	2020
<b>Council for Accreditation of Counseling and Related Education Programs (CACREP)</b>				
Master's degree programs to prepare individuals for community counseling, mental health counseling, marriage and family counseling, school counseling, student affairs practice in higher education	X	X	2000	2015



<b>National Architectural Accrediting Board, Inc.</b>				
Architecture (ARCH) - first professional degree programs	X	X	2011	2017
<b>National Association of Schools of Art and Design</b>				
Baccalaureate degree in Fine Arts	X	X	2007	2015
Master's Degree in Fine Arts (MFA)	X	X	2007	2015
<b>National Association of Schools of Arts and Design</b>				
Art & Design (ART) - Degree-granting schools and departments and non-degree-granting schools	X	X	2012	2017
<b>National Council for Accreditation of Teacher Education (NCATE)</b>				
Baccalaureate and graduate programs for the preparation of teachers and other professional personnel for elementary and secondary schools	X	X	2013	2020
<b>National Recreation and Park Association</b>				
Parks, Recreation, and Tourism Management - undergraduate and graduate programs	X	X	2010	2015
<b>Planning Accreditation Board</b>				
Master of City and Regional Planning (MRCP)	X	X	2008	2015

<b>Society of American Foresters</b>				
Forestry (FOR) programs leading to a bachelor's degree or higher first professional degree	X	X	2012	2023